

### **REMARKS**

Claims 1, 2, 5, 7 and 9-24 are pending. Claims 3, 4 and 6 have been canceled. Claims 11-24 are withdrawn from consideration.

Claim 1 has been amended to recite the subject matter of canceled claims 4 and 6.

Claim 5 has been amended so as not to depend from a canceled claim.

No new matter has been added by way of the above-amendment.

### **I. Issues under 35 U.S.C. § 112**

Claims 1-7 and 9-10 are rejected under 35 U.S.C. § 112, first paragraph for containing new matter. Applicants respectfully traverse the rejection.

Specifically, the Examiner objects to the last clause of claim 1 which is:

“wherein solid component (A) is not formed by seed polymerization using an additional polymerization polymer.”

In response, Applicants have deleted this clause from claim 1. As such, withdrawal of the rejection is respectfully requested.

### **II. Issues under 35 U.S.C. § 102**

Claims 1-7 and 9-10 are rejected under 35 U.S.C. § 102 (b) as being anticipated by Shigemori et al. (U.S. 2003/0049559). Applicants respectfully traverse the rejection.

Applicants respectfully submit that the present invention, as set forth in the August 3, 2007 Amendment, is patentable over Shigemori. However, in order to advance prosecution, Applicants have amended claim 1 to have the following features:

**A particle** having a core-shell structure which comprises

- i) a meltable organic solid component (A) comprising a plurality of organic solid materials each having a different affinity relative to a water-soluble auxiliary component (B), and the water-soluble auxiliary component (B) comprises at least an oligosaccharide (B1), wherein (A) comprises:
  - a) a hydrophobic polymer (A1), and
  - b) a hydrophilic polymer (A2) having at least one hydrophilic group selected from the group consisting of a hydroxyl group, a carboxyl group, an amino group, an imino group, an ether group, an oxyalkylene group, an ester group and an amide group,wherein at least one of the hydrophobic polymer (A1) and the hydrophilic polymer (A2) is a condensation-series thermoplastic resin
- ii) wherein the core (of the core-shell structure) contains the hydrophobic polymer (A1), and
- iii) wherein the shell (of the core-shell structure) contains the hydrophilic polymer (A2).

Applicants respectfully submit that Shigemori fails to teach or fairly suggest the particle having all of the features described above. Specifically, Shigemori fails to teach or suggest a core/shell-structured particle which substantially comprises a condensation-series thermoplastic resin. Applicants note that Shigemori discloses thermoplastic resins as binder resins. However, the species of the disclosed thermoplastic resins are conventional thermoplastic resins used in toners. Shigemori also discloses condensation-series thermoplastic resin such as a polyester or polyamide, as an example of the binder resins. These particles of Shigemori are substantially prepared by a seed polymerization which requires a bead polymerization or emulsion polymerization. For example, Shigemori discloses that as a method for obtaining the core-shell type colored particles, an in-situ polymerization method can be adopted ([0035]). Shigemori also discloses in the Examples as follows:

"polymerizable monomer composition for a core was added to said dispersion liquid of the magnesium hydroxide colloid and agitated ... . To the resultant mixture, added was ... t-butyl peroxy-2-ethylhexanoate ... as a polymerization initiator to obtain a mixture. ... thus-prepared dispersion liquid of the obtained monomer mixture was provided into a reactor ... , heated ... to allow it to be polymerized. ... to a vessel containing the resultant polymerized mixture, provided was a mixture obtained by dissolving 0.3 part of 2,2'-azobis(2-methyl-N-(2-hydroxyethyl)-propionamide) ... as a water-soluble polymerization initiator in an aqueous dispersion liquid of said polymerizable monomer for a shell. The mixture in the vessel was agitated to allow said polymerizable monomer for a shell to be polymerized continuously for 4 hours and, then, the reaction was terminated to obtain a dispersion liquid A of unrefined colored particles." ([0154])

As the Examiner is aware, it is essential to eliminate water formed by a condensation reaction or polymerization of monomer components of the condensation-series thermoplastic binder resin for proceeding the condensation reaction. That is, a condensation reaction (polymerization) cannot proceed by the bead polymerization or emulsion polymerization disclosed by Shigemori from a view point of polymerization mechanisms. Thus, a person skilled in the arts would not be motivated to prepare core/shell-structured particles comprising a *condensation-series* thermoplastic resin as presently claimed based on the disclosure of Shigemori. Therefore, the above specific particle of the present invention is clearly different and would not be obtained from the teachings of Shigemori.

The present invention also shows unexpected advantages. That is, since Shigemori prepares a particle substantially by a seed-polymerization, particles comprising a condensation-series thermoplastic resin would never be obtained by Shigemori.

Contrarily, according to the present invention, since a specific combination of hydrophobic and hydrophilic polymers having a specific affinity relative to an oligosaccharide is used for a particle preparation, particles having a core-shell structure can be efficiently obtained even if a condensation-series thermoplastic resin is used. Moreover, the particles have a smooth surface and a spherical shape. Such advantages would never be predicted from Shigemori.

Based on the foregoing, significant patentable distinctions exist between the present invention and the teachings of Shigemori. As such, withdrawal of the rejection is respectfully requested.

### **III. Double Patenting**

The Examiner has imposed following two obviousness-type double patenting rejections:

(A) Claims 1-24 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-28 of copending Application No. 10/515,420 ("the '420 application").

(B) Claims 1-24 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-18 of copending Application No. 10/580,605 ("the '605 application") in view of Shigemori et al.

Applicants respectfully traverse both provisional obviousness-type double patenting rejections. In response, Applicants co-file herewith Terminal Disclaimers over the '420 application and the '605 application, respectively.

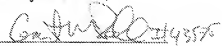
In legal principle, the filing of a TD simply serves the statutory function of removing the rejection of obviousness-type double patenting, and does not raise a presumption on the merits of the rejection. It is improper to view the simple expedient of "obviation" as an admission or acquiescence on the merits. *Ortho Pharmaceutical Corp. v. Smith*, 22 USPQ2d 1119, 1124 (Fed. Cir. 1992) citing *Quad Envtl. Technologies Corp. v. Union Sanitary Dist.*, 946 F.2d 870, 874, 20 USPQ2d 1392, 1394-95 (Fed. Cir. 1991).

Based on the foregoing, the provisional obviousness-type double patenting rejections are rendered moot.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.14; particularly, extension of time fees.

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Respectfully submitted,

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Attachments: Terminal Disclaimer over Application Nos. 10/515,420 and 10/580,605 (1 page)